



PH3000 Series On/Off grid hybrid Solar Inverter

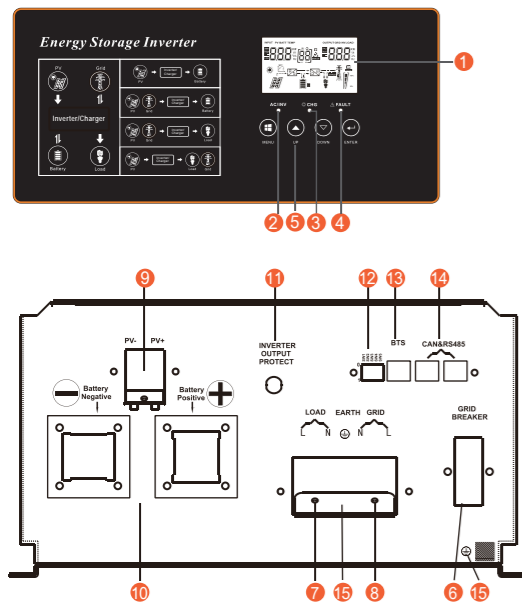
Feature:

- On-grid inverter with energy storage
- Combining solar system, AC utility, and battery power source to supply continuous power
- Multiple operations: Basic Grid-Tie (On-Grid), Off-Grid, Grid-Tie with Battery Back-up also recognized as Grid-Interactive
- Pure sine wave output

Introduction:

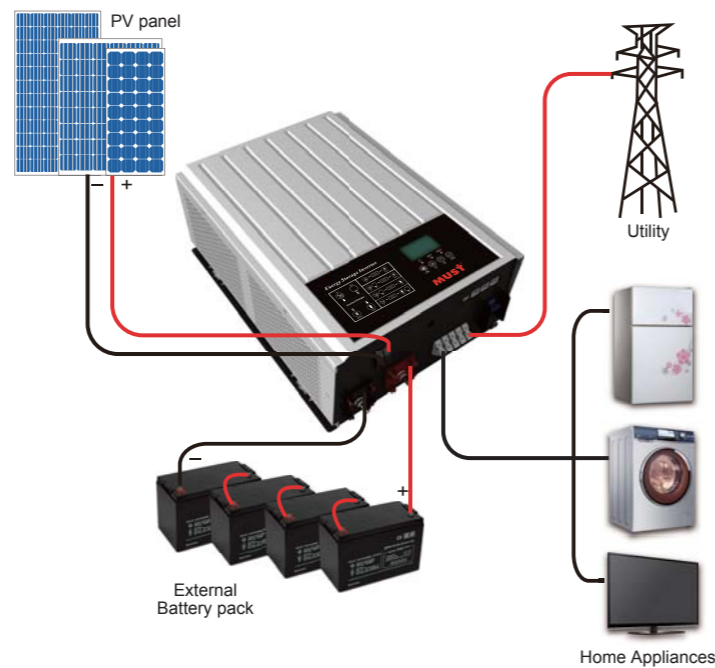
This is a multi-function Energy Storage Inverter, combining functions of inverter, On-Grid, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

LCD Display Information



- | | |
|-----------------------|----------------------------------|
| 1. LCD display | 9. PV input |
| 2. Status indicator | 10. Battery input |
| 3. Charging indicator | 11. Inverter output protect |
| 4. Fault indicator | 12. Switch |
| 5. Function buttons | 13. BTS |
| 6. Grid breaker | 14. CAN&RS485 communication port |
| 7. Load | 15. Earth |
| 8. Grid | |

Solar System Connection



Back Panel



Specification

| MODEL | PH30-2K | PH30-3K | PH30-4K | |
|--|------------------------------------|---|----------------------|--------------------|
| Default Battery System Voltage | | 48VDC | | |
| INVERTER OUTPUT | Rated capacity | 2500VA | 3750VA | 5000VA |
| | Rated output power | 2000W | 3000W | 4000W |
| | Rated output voltage and frequency | 230Vac / 50Hz | | |
| | Rated output current | 8.7A | 13A | 17.4A |
| | Output voltage precision | 230Vac±1% | | |
| | Output frequency precision | 50Hz±0.1% | | |
| | THD (Linear loads) | Off grid≤2% | | |
| | | Grid discharge ≤3% | | |
| | Dynamic response speed (0→100%) | Grid charge ≤3% | | |
| | | 20ms | | |
| | Power factor | Grid discharge 99.9% & Grid charge 99.9% | | |
| | | 30 minutes @ 100%<load≤110% | | |
| | Overload capability | 1 minutes @ 100%<load≤125% | | |
| | | 30 seconds @ 125%<load≤150% | | |
| | | 10 seconds @ 150%<load≤200% | | |
| 5 seconds @ load>200% | | | | |
| 5 seconds @ short circuit | | | | |
| Grid / Off grid change time | < 10ms | | | |
| Output wave | sine wave | | | |
| Inverting efficiency 80% resistive loads | ≥92% | ≥93% | | |
| Standby Power Consumption | < 2W | | | |
| AC INPUT | AC Input maximum of current | 17.4A | 26A | 34.8A |
| | AC Input voltage | 184Vac ~ 253Vac | | |
| | AC Input frequency | 47.5Hz ~ 51.5Hz | | |
| BATTERY | Rated input voltage | 48VDC | | |
| | Allowed input DC voltage range | 40VDC ~ 62VDC | | |
| | Low voltage alarm | 42VDC | | |
| | High voltage alarm | 60VDC | | |
| SOLAR CHARGER & AC CHARGER | PV Open Circuit Voltage | 145VDC | | |
| | Max PV Input Power | 2600W | 3200W | 3200W |
| | Max Solar Charging Current | 45A | 60A | |
| | Max AC Charging Current | 45A | 60A | 80A |
| DISPLAY & PROTECTION FUNCTION | LED indication | Systematic operation, indication of charge and discharge, indication of fault | | |
| | LCD display | output voltage, output current, grid voltage, grid current, voltage of storage battery, load power, chart of capacity | | |
| | Protection Function | Input LV protection Input OV protection Output overload protection Output Short Circuit Protection | | |
| MECHANICAL SPECIFICATIONS | Mounting | Wall mounted | | |
| | W*H* D(mm)/Net Weight(kg) | 337*462*183mm/25kg | 337*462*183mm/29.5kg | 370*462*183mm/35kg |
| OTHER | Communication terminal | RS485 / CAN bus | | |
| | Operation Temperature Range | -25°C ~ +50°C | | |
| | Environmental Protection Rating | Indoor(IP20) | | |
| | Ambient humidity | 0 ~ 90% relative humidity(non-condensing) | | |
| | Altitude | ≤3000m | | |

* Product specifications are subject to change without further notice.

Approximate Back-up Time Table

| Model | Load (W) | Backup Time@48V 100Ah(min) | Backup Time@48V 200Ah(min) |
|-------|------------|----------------------------|----------------------------|
| 2KW | 200 | 1270 | 2541 |
| | 1000 | 208 | 488 |
| | 2000 | 82 | 203 |
| 3KW | 300 | 847 | 1694 |
| | 1500 | 123 | 315 |
| | 3000 | 50 | 123 |
| 4KW | 400 | 614 | 1281 |
| | 2000 | 89 | 205 |
| | 4000 | 38 | 89 |